

Implantable Medical Device with Multiple Electrode Lead and Connector with Central Fastener

Abstract

An implantable medical device such as a cardiac stimulator, a multi-electrode lead attached to the device, and a connector coupling the device to the lead. The lead has multiple electrodes, each electrode connected to a wire extending through the lead. The electrodes may be circumferential coils or rings, for example. The lead has a connector that fits into a recess on a surface of the device or apparatus. A bottom wall of the recess has an array of apparatus connections deployed around a threaded bore. The connector is attached to the apparatus by a screw with a threaded shaft and an enlarged head. The screw passes through a central bore in the connector. Electrical connections form a regular pattern, such as a rectangular or square grid, or a radial pattern, around the central bore. A pair of O-rings or seals surround the connections. A gasket, mounted on male connections or contacts, fits around female connections that may be on either the apparatus or the connector.